

## **WHAT IS CLAIMED IS:**

1. A process for producing a soy isoflavone concentrate, comprising the steps of:
  - (a) providing soy molasses;
  - (b) diluting the soy molasses with water to obtain water-diluted soy molasses;
  - (c) subjecting the water-diluted soy molasses to ultrafiltration to obtain a permeate;
  - (d) extracting the permeate with ethyl acetate to obtain an extract; and
  - (e) removing ethyl acetate from the extract to obtain a soy isoflavone concentrate.
2. The process of Claim 1, wherein said diluting step (b) comprises diluting the soy molasses with water at a ratio of at least 1:1 (water:soy molasses).
3. The process of Claim 1, wherein said diluting step (b) comprises diluting soy molasses with water at a ratio of at least 2:1 (water:soy molasses).
4. The process of Claim 1, wherein said subjecting step (c) comprises subjecting the water-diluted soy molasses to ultrafiltration using a membrane having a molecular weight cut-off ("MWCO") of between 1,000 and 300,000.
5. The process of Claim 1, wherein said subjecting step (c) comprises subjecting the water-diluted soy molasses to ultrafiltration using a membrane having a molecular weight cut-off ("MWCO") of between 5,000 and 100,000.
6. The process of Claim 1, wherein said subjecting step (c) comprises subjecting the water-diluted soy molasses to ultrafiltration at a temperature of between 50° C and 90° C.
7. The process of Claim 1, wherein said subjecting step (c) comprises subjecting the water-diluted soy molasses to ultrafiltration using one of a ceramic membrane and a spiral wound membrane.

8. The process of Claim 1, further comprising the additional step of pre-filtering the water-diluted soy molasses, between said dilution step (b) and said subjecting step to ultrafiltration step (c).

9. The process of Claim 1, further comprising the additional step, after said extracting step (d), of again extracting the permeate with ethyl acetate to obtain an extract.

10. The process of Claim 1, wherein in said extracting step (d), the ratio of ethyl acetate to permeate is between 1:1 and 20:1 (ethyl acetate:permeate).

11. A soy isoflavone concentrate, comprising:

- a) at least 50 wt. % isoflavones on a moisture-free basis, inclusive of:
- b) at least 15 wt. % daidzin;
- c) at least 20 wt. % genistin; and
- d) at least 4 wt. % glycitin.

12. The soy isoflavone concentrate of Claim 11, further comprising a genistin:glycitin ratio of at least 3.0.

13. The soy isoflavone concentrate of Claim 11, further comprising a genistin:daidzin ratio of at least 1.0.

14. The soy isoflavone concentrate of Claim 13, wherein said genistin:daidzin ratio is at least 1.2.